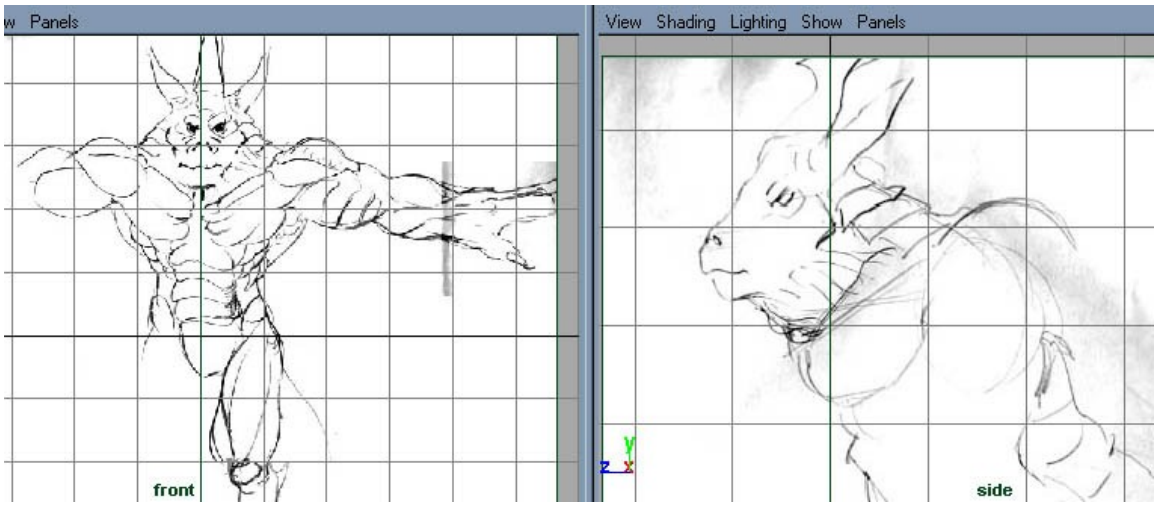
Modeling Dragon Man-Part 1

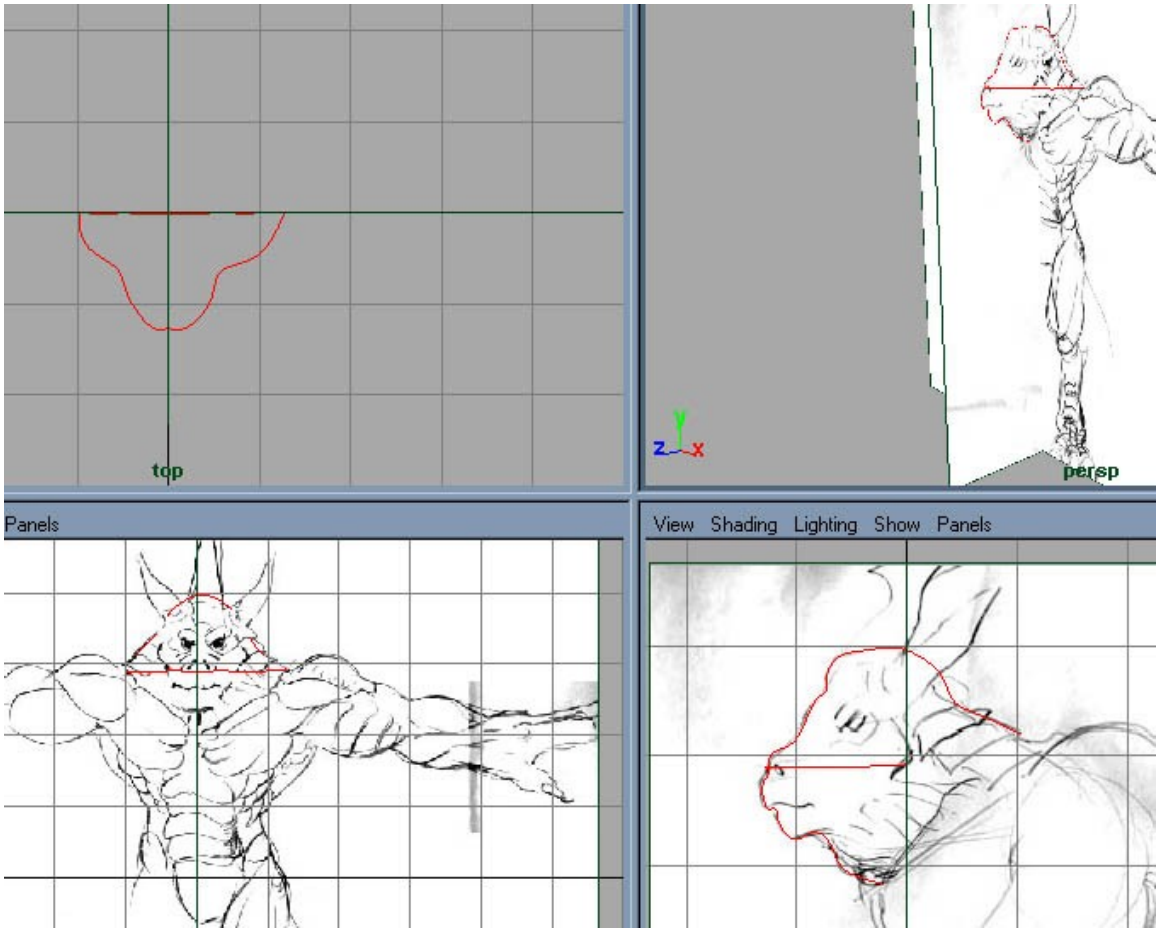
I would like to share with you how I model this creature. There is no special technique or secret on the techniques I use, but a lot of pulling CVs…sound tedious. Before we start, you should know the basic operation of Maya. I will not tell you how to create image plane or how to draw line and etc.☺(getting lazier…☹ or busier). If you are not familiar with Maya, you should go through my first modeling tutorial: Modeling NURBS Dragon, then you will have better idea.

Let's get started! First I do some sketches, then imported them into Maya as image plane.



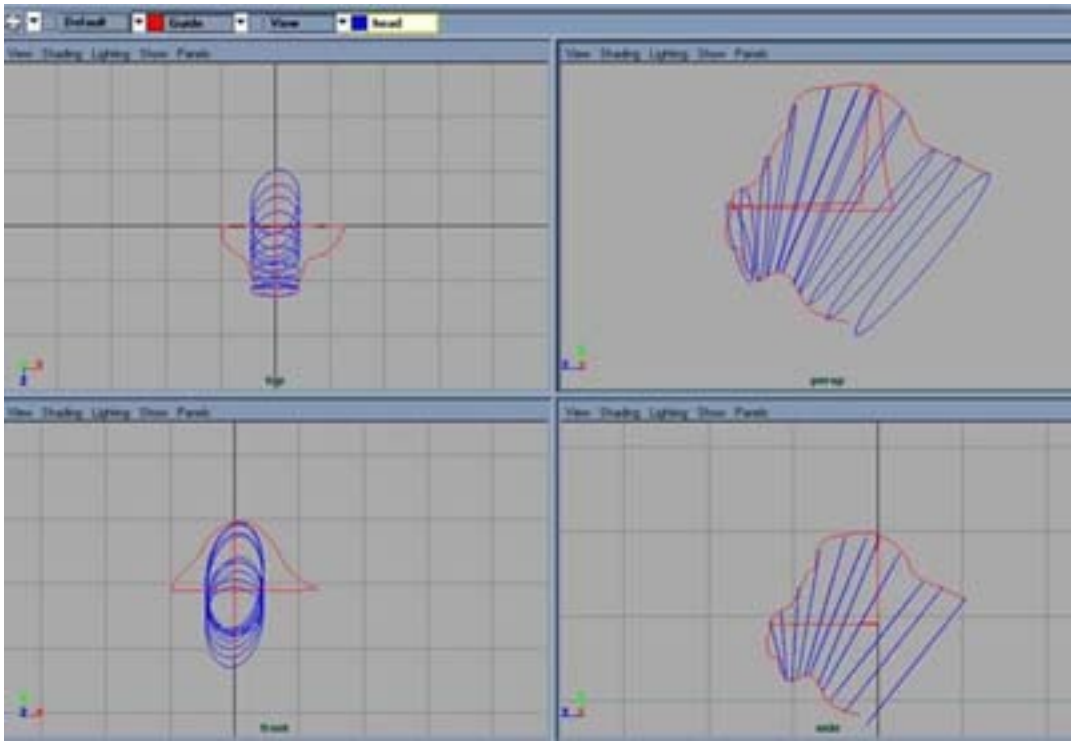
This is how it looks in perspective view where I align the front and side head together.

Then I use EP curve tool to draw guidelines in front, side and top view. Next I create a layer name it as guide and assign curves to it. Not to worry how many Edit Point the curve should have. It is only a guideline for my model. Then I create another layer name it as View and assign image planes to it, so that I can turn on/ of its visibility.

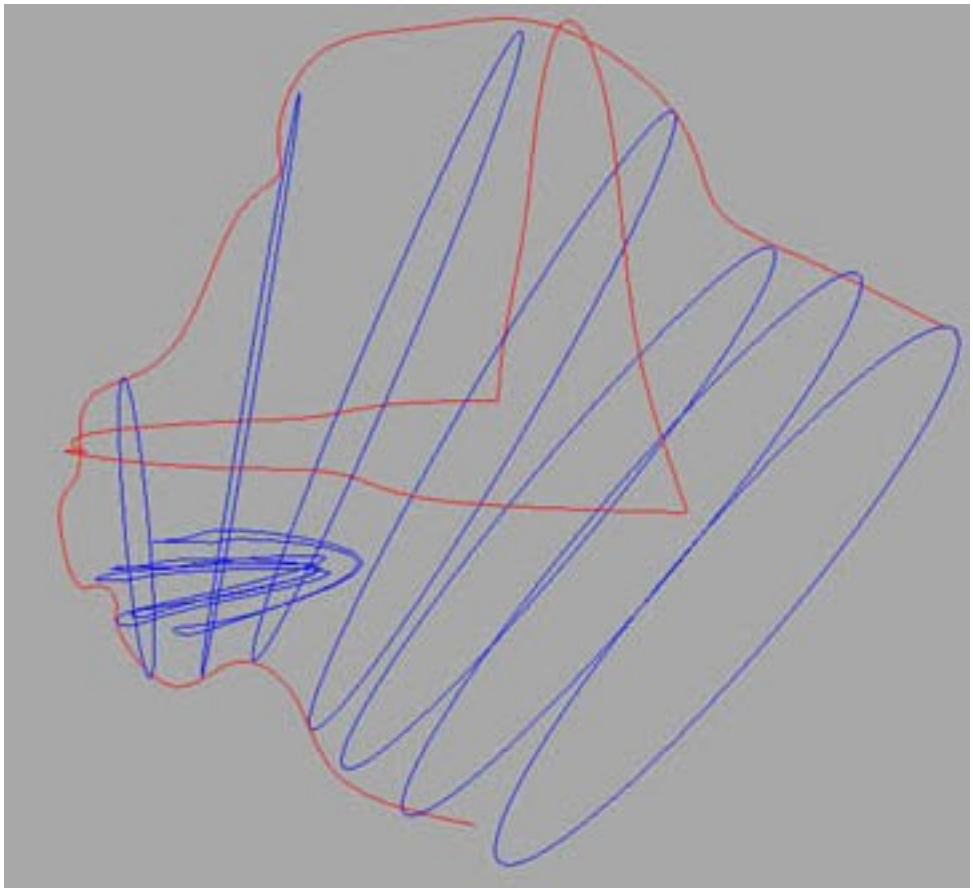


Model the Head

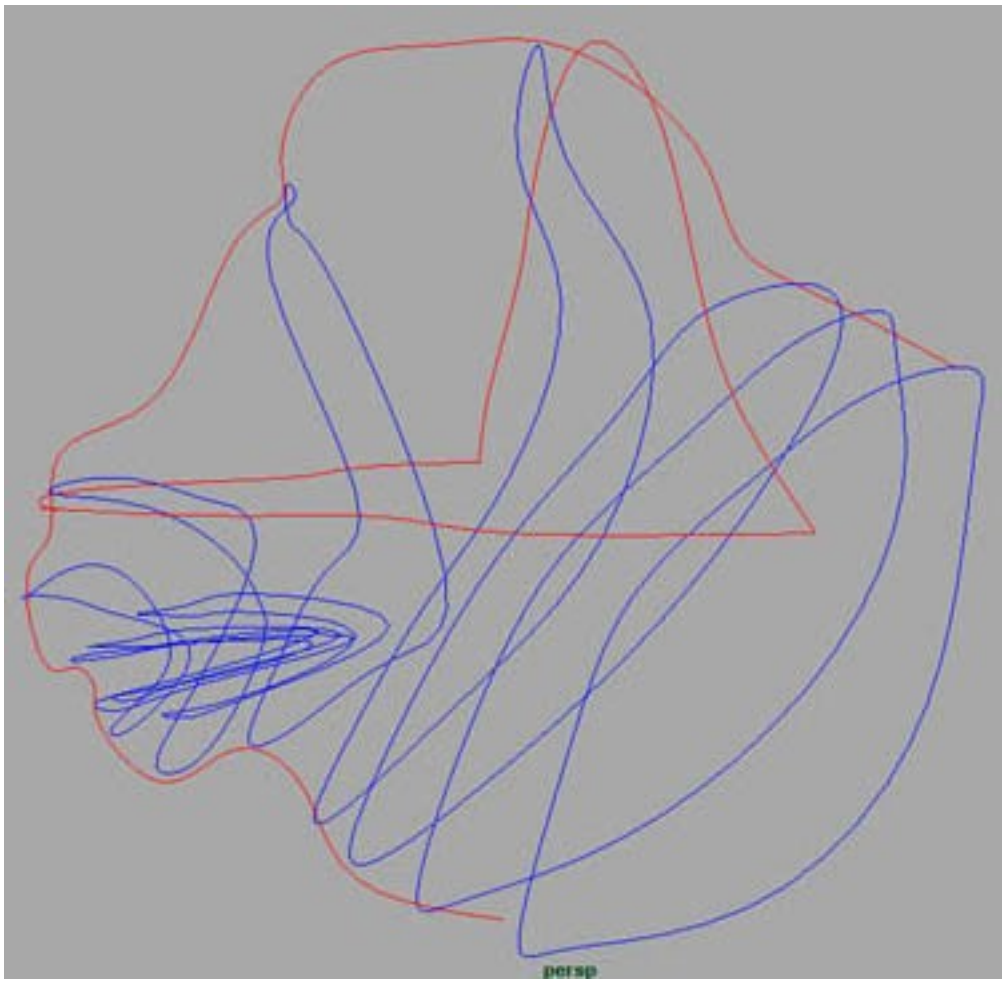
1. First I create a NURBS circle. Then I place it at the position of neck. Next I duplicate 10 more circles, after that rotate and translate them to the position shown in figure 1.


(Figure1)

2. Then, I select the circle at the mouth area, pick mask Edit Point. Bend it into mouth’s shape. Repeat the same to 2 more circles, but scale them smaller and translate them inside the mouth. We will use these curve to form surface inside the mouth. (Figure 2)

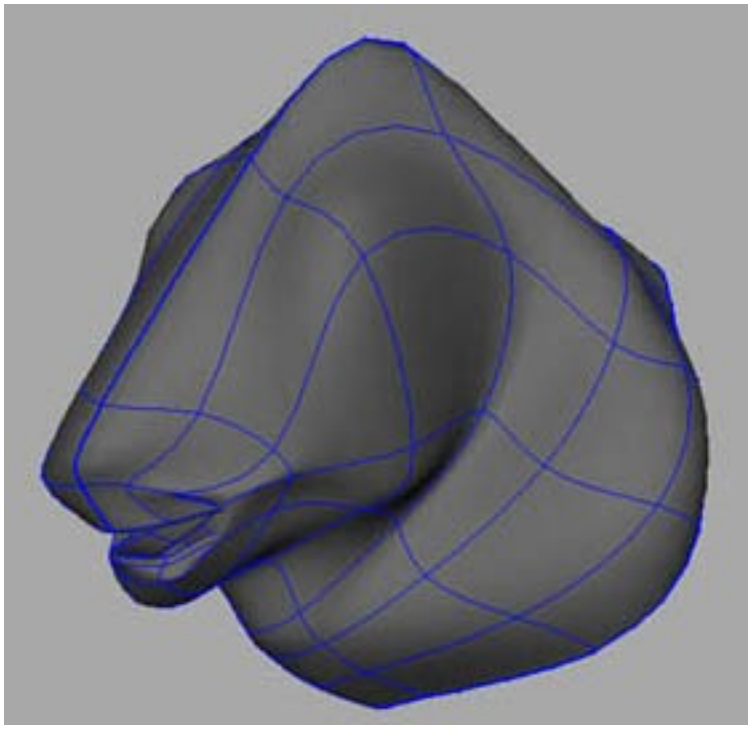

(Figure 2)

3. Next, I pull the EP from multiple view of each curve to get the rough shape of head. (Figure 3)

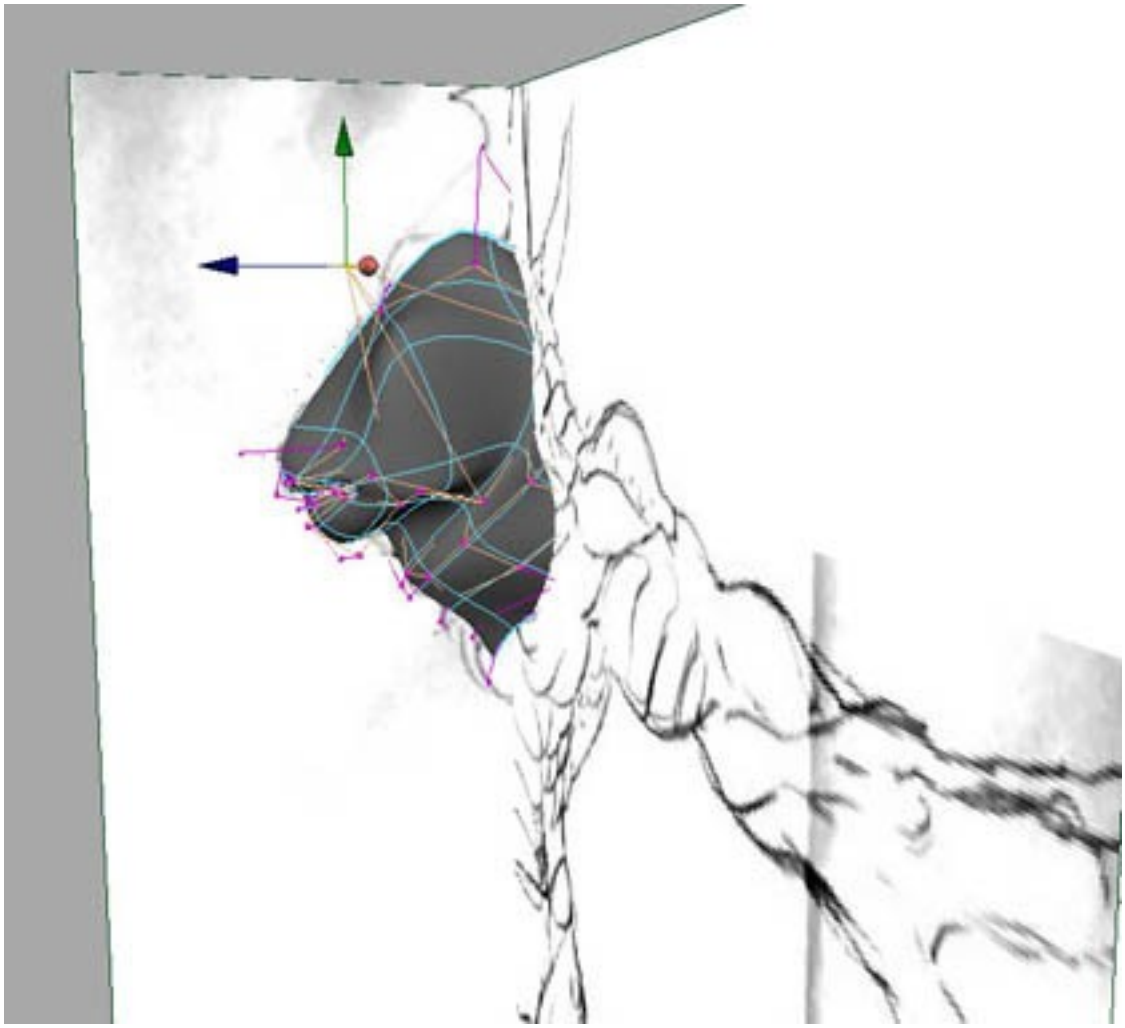


(Figure 3)

4. Then, select the curves in order, let say, from curve inside mouth to the curve on the neck. Once all the curves had been selected, perform loft. (Figure 4)

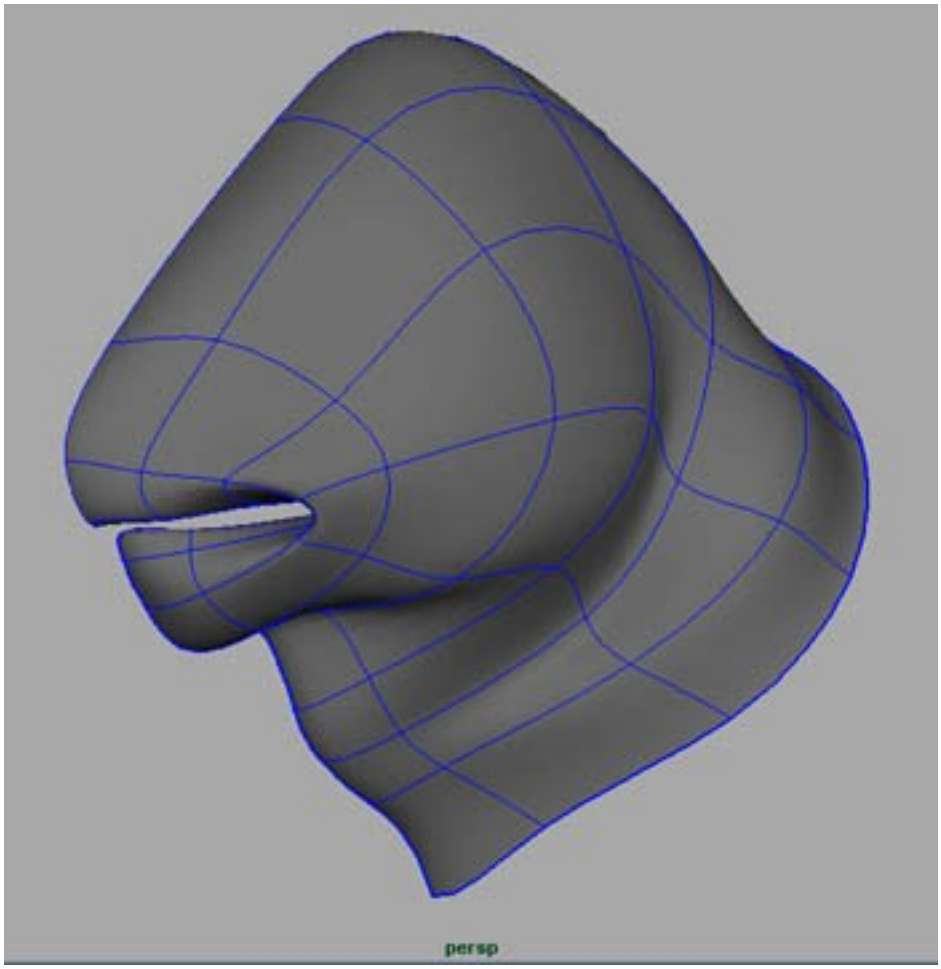

(Figure 4)

5. Oh~ no, now is where the tedious part come in. Before that, detach the head into half, delete the right part. This is to help you, so that you don’t have to pull the CVs of left and right side of the head. When done, start pulling the CVs! Get the model into the rough but smooth shape that you want. (Figure 5)



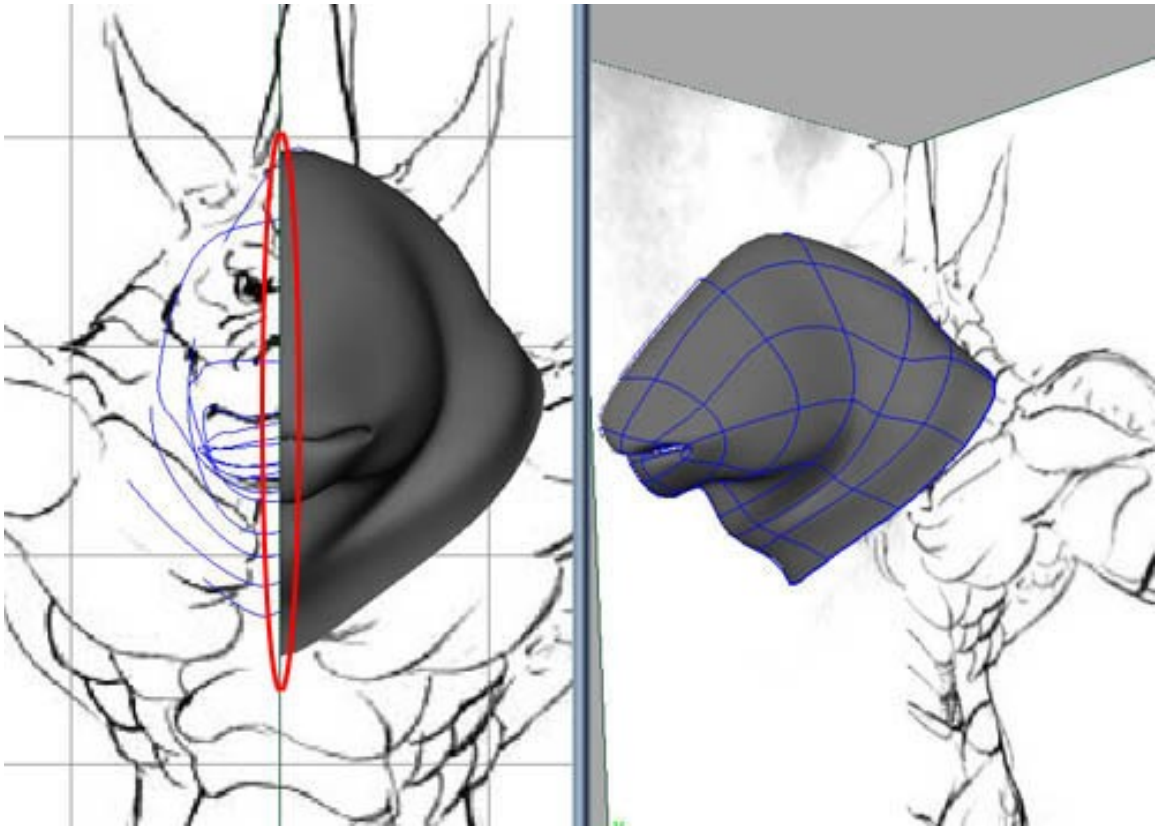
(Figure 5)

6. That’s how it’s look like… (Figure 6)



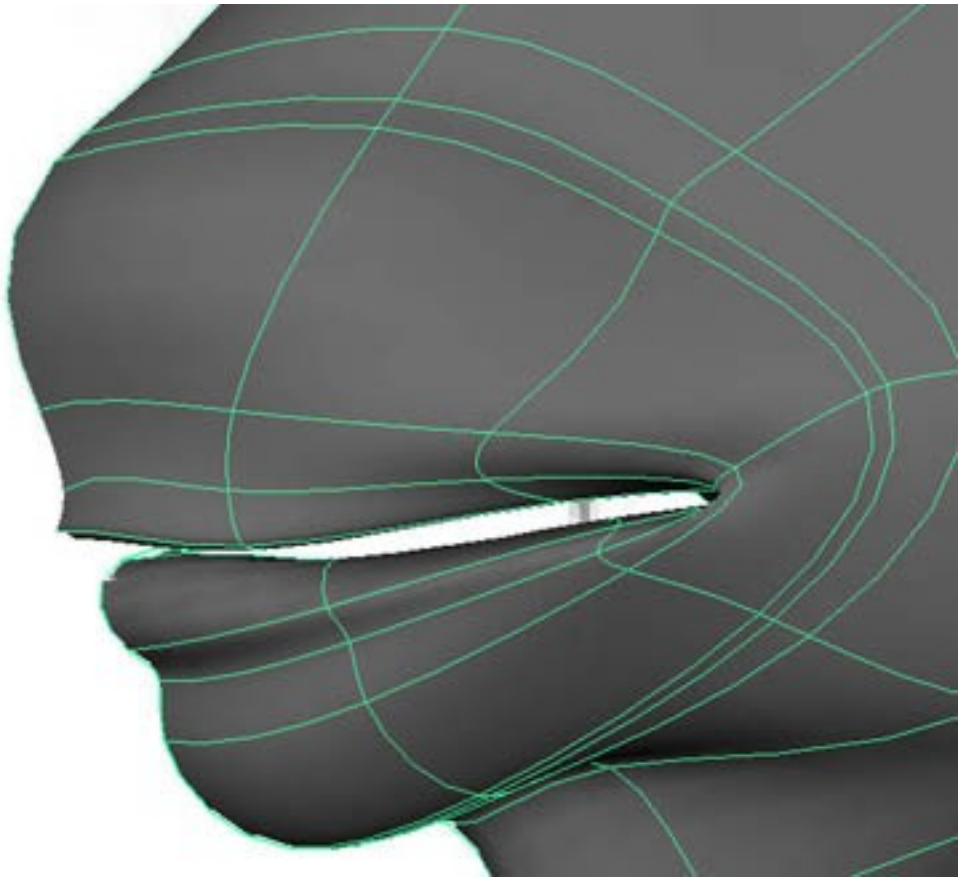
(Figure 6)

7.Aligh the CVs in red circle to the Y-axis, make sure don’t accidentally move the CVs in X and Z direction. (Figure 7)



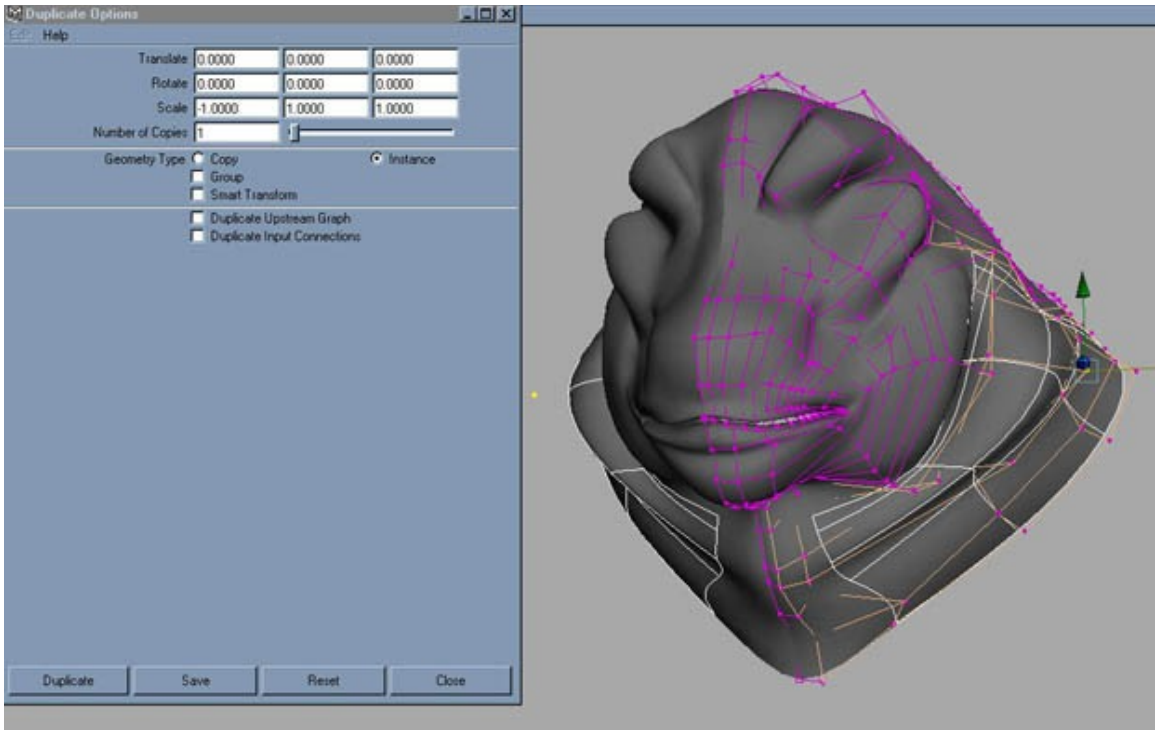
(Figure 7)

8. For the mouth’s area, I need more CVs to get the shape out. So I insert isoparms and start to pull the CVs around the mouth. (Figure 8)



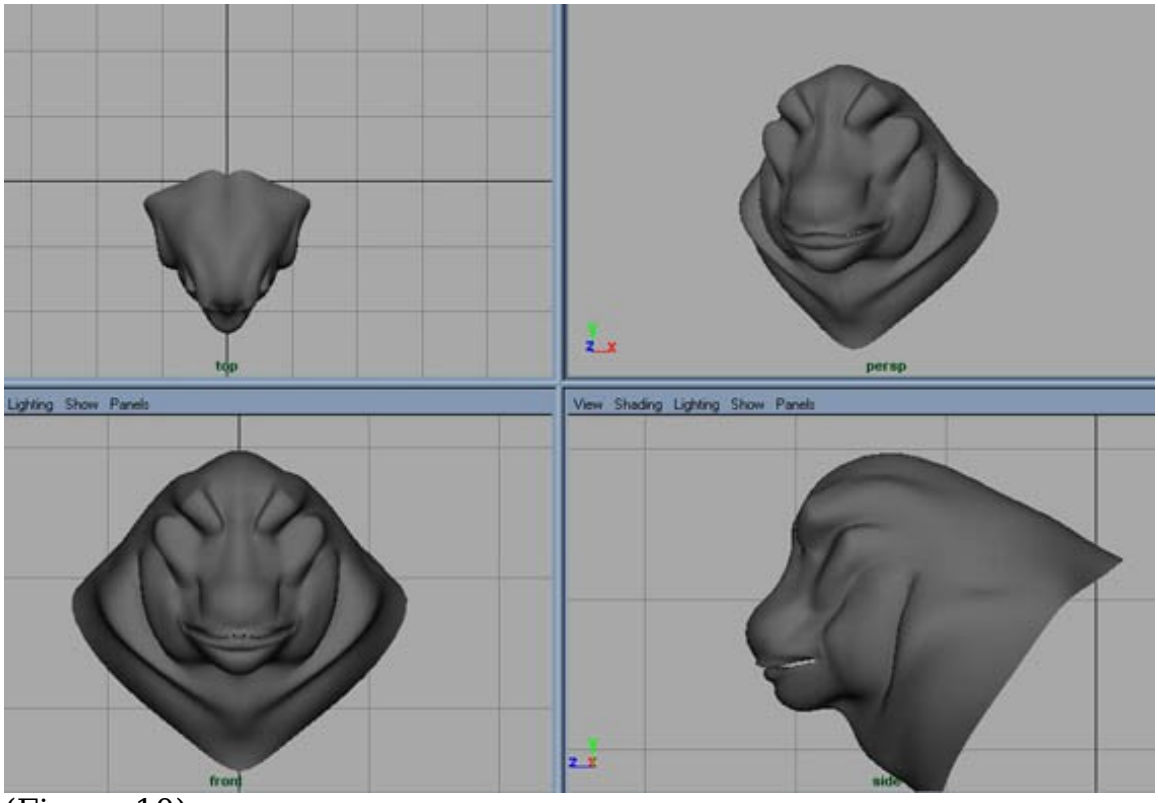
(Figure 8)

9.Then I insert more isoparm to the head and pull the CVs, the creature’s head start to form. I select the left head, use duplicate instance and mirror it to the right. With duplicate instance, when I pull CVs or insert isoparms of left side head, the right side will follow. This will help me to visualize the complete head of the creature. (Figure 9)



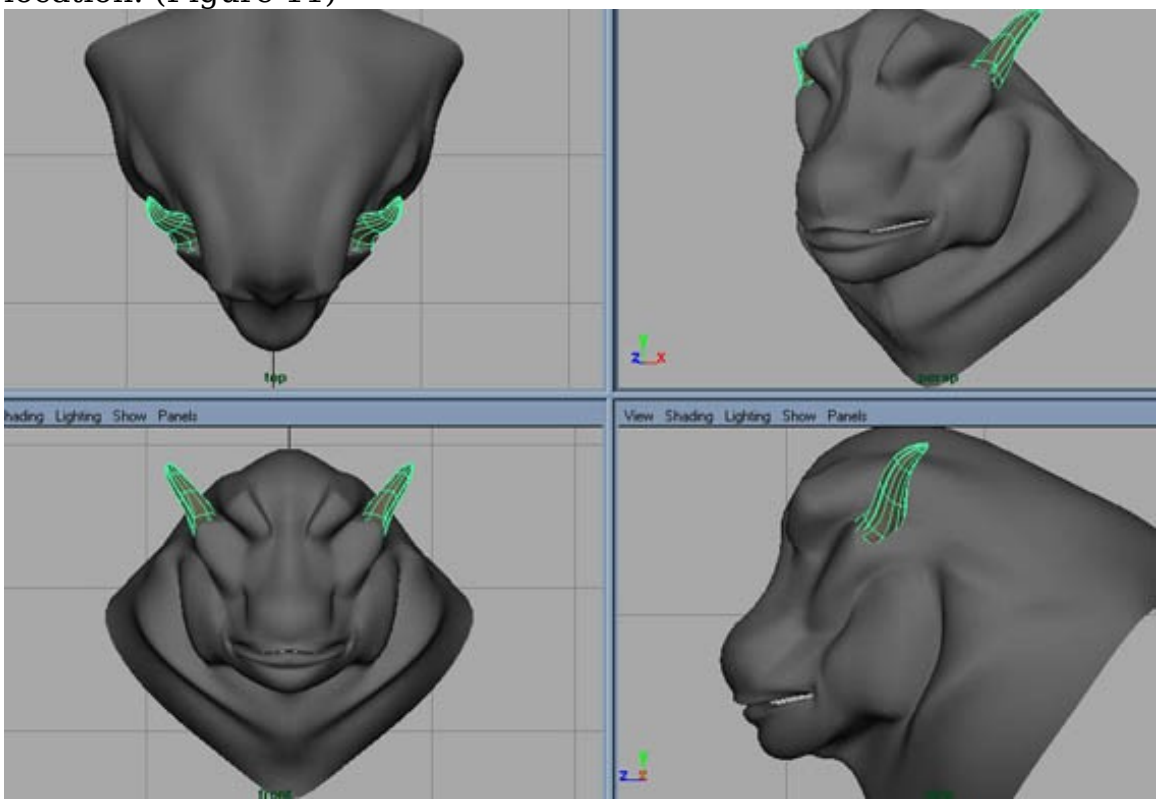
(Figure 9)

10. This is how it looks like. (Figure 10)



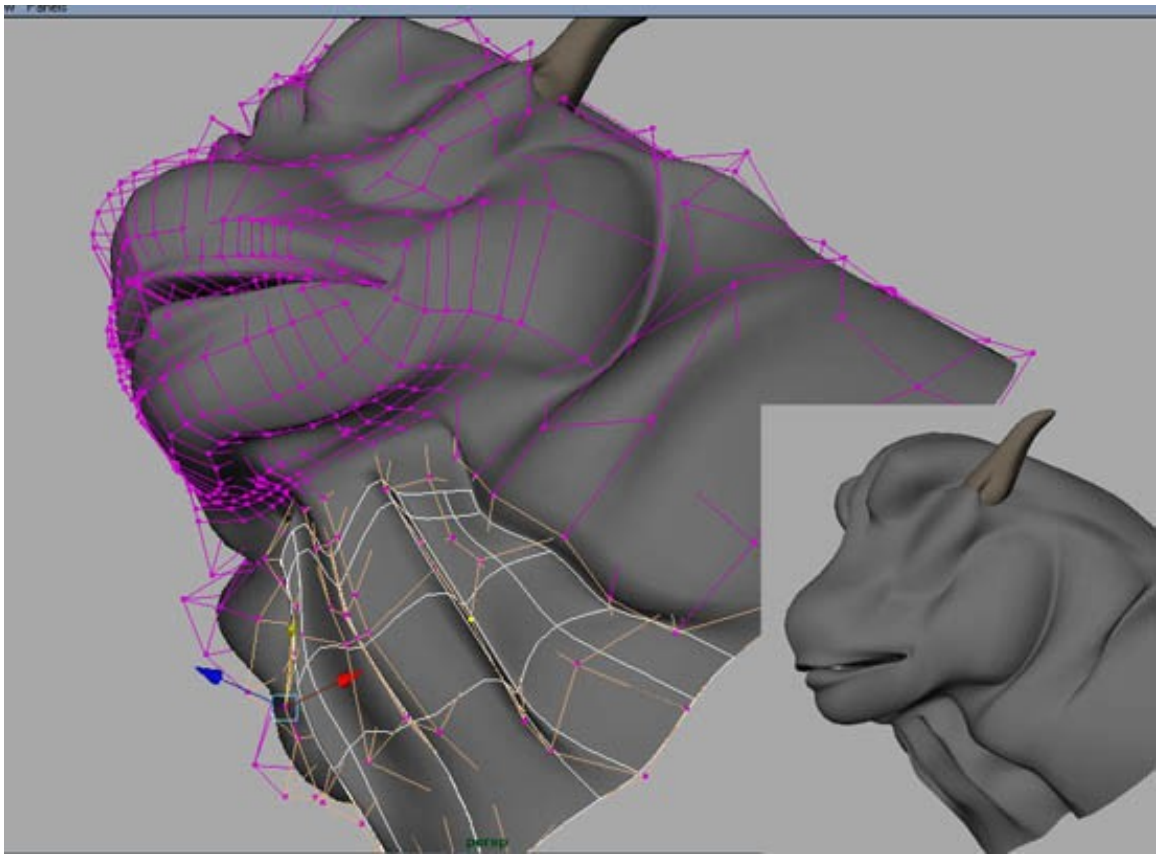
(Figure 10)

11.The horn is deformed from a NURBS circle. Then put them to the location. (Figure 11)

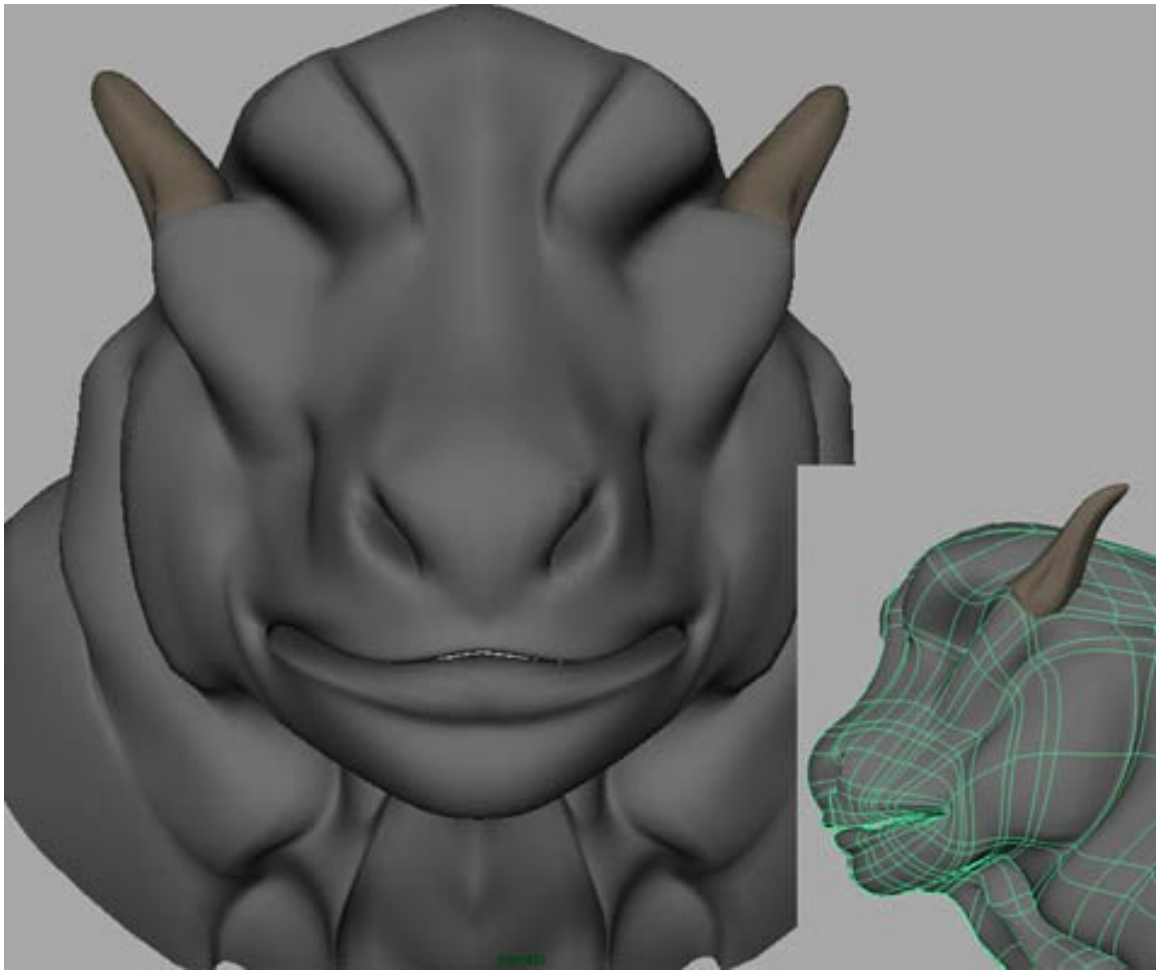


(Figure 11)

12.Insert more isoparms to the neck area, pull CVs to get the shape of figure 12. (Figure 12)

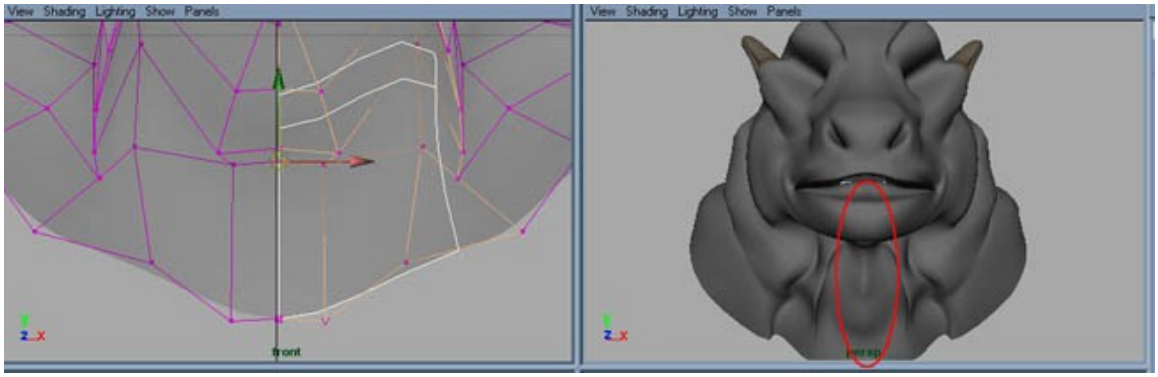

(Figure 12)

13. O.K, now I delete the right side head. Then I mirror the left head to right again. This time, instead of duplicate instance, turn on copy in the duplicate options box. (Figure 13)
At this stage, I add more isoparm at the nose part so that the CVs allow me to create noise trail.

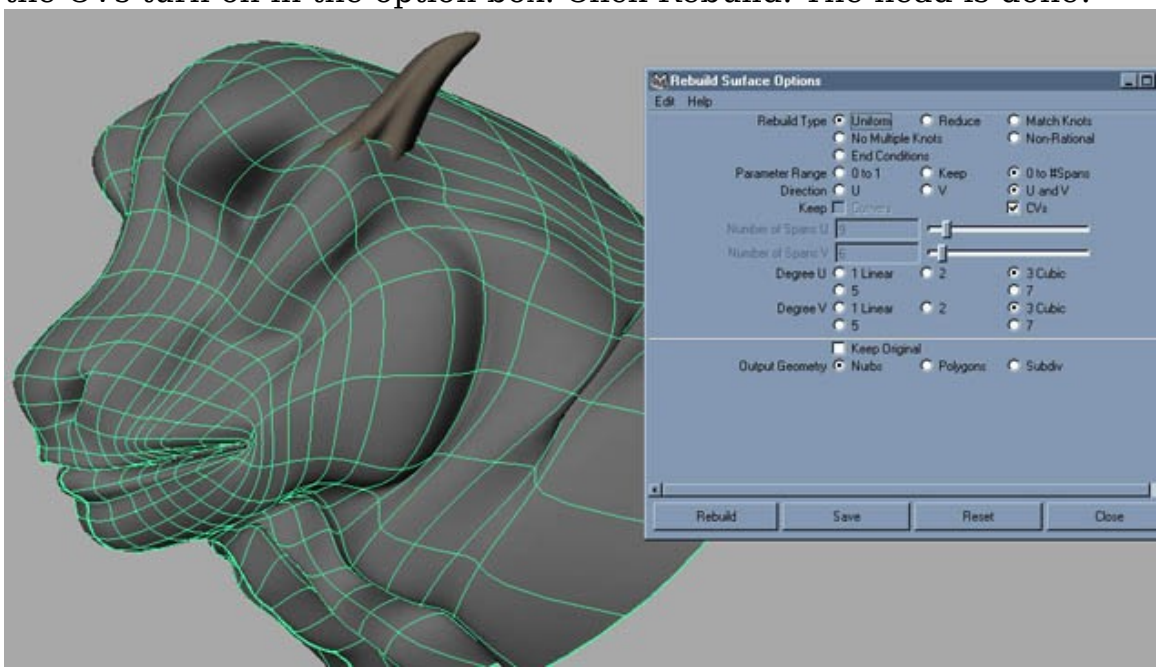


(Figure 13)

14.Now zoom closely to the edge of the left and right head. Pick mask Hull and CVs. Turn on X-ray and back face culling from shading menu, located on top left side of view port. You will see the CVs of both sides is not meet together. This will cause seam to show up where two surfaces meet. We will fix this manually. Hold down V for snap to point. Select 1 CVs, move and snap them to the CVs in the opposite. Do this to all of the edge. (Figure 14)



(Figure 14)
15.Then I attach the surfaces into 1 surface. Then rebuild surface with the CVs turn on in the option box. Click Rebuild. The head is done!



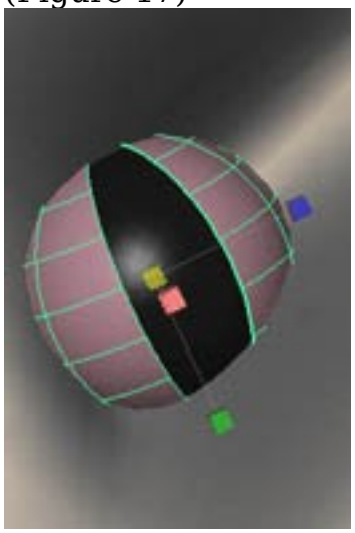
(Figure 15)

Model the eyes

16. Create NURBS sphere and put it to the eyeball's location. (Figure 16)

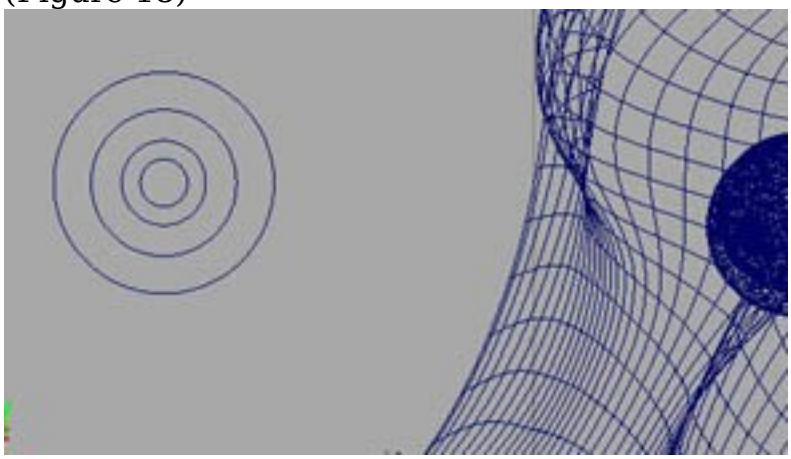
(Figure 16)

17.Select the eyeball and duplicate it. This will be a thin membrane skin of eye. Then scale it a bit larger, in the command channel, use the start swap and end swap to “open” a hole. We will keep the history of this sphere, the history can be use to animate the eye later. (Figure 17)



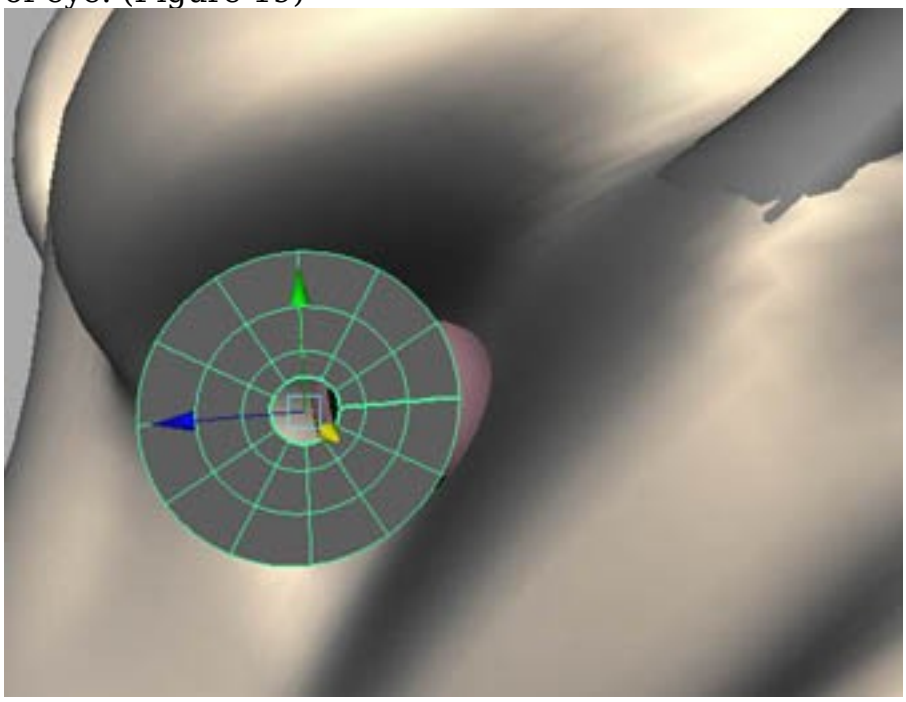
(Figure 17)

18.Then create 1 NURBS circle, duplicate 4 and scale it as shown in figure 18.
(Figure 18)



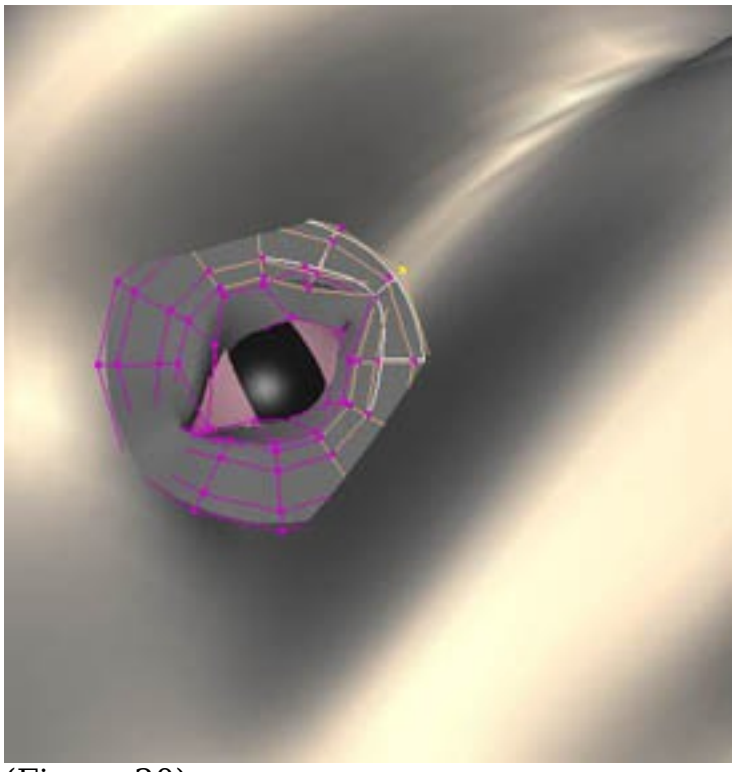
(Figure 18)

19.Select them in order, then perform loft. Translate it to the position of eye. (Figure 19)

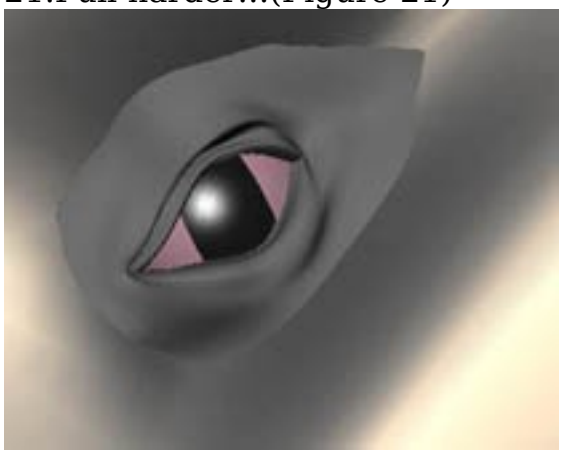


(Figure19)

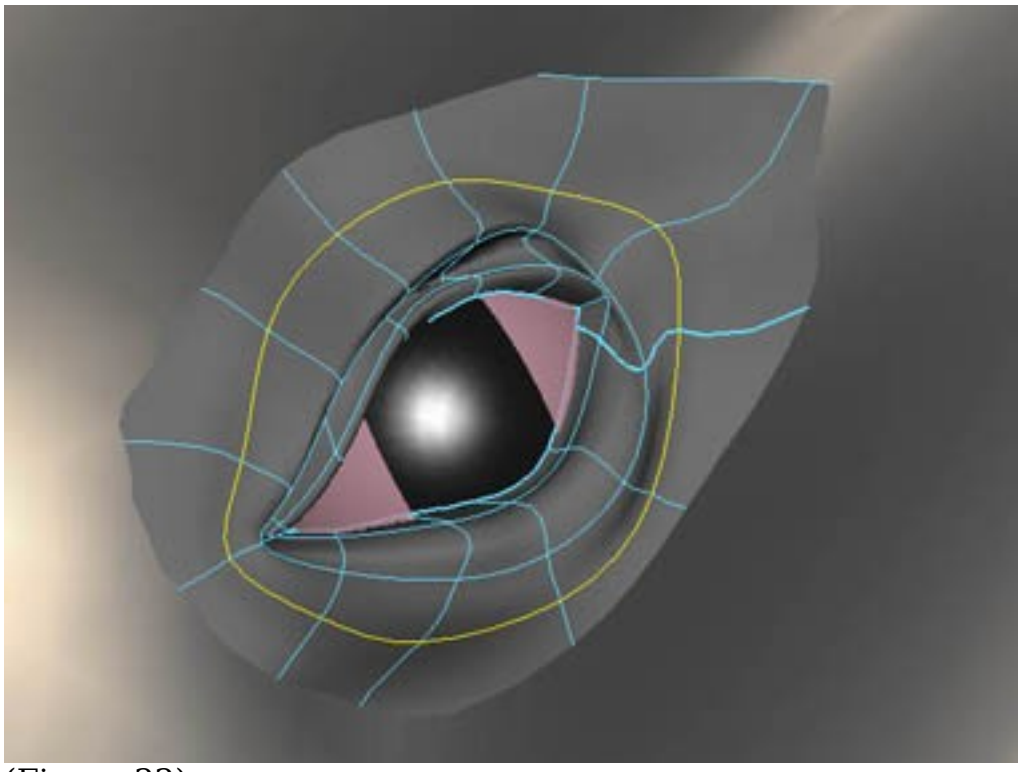
20.Pull the CVs… (Figure 20)


(Figure 20)

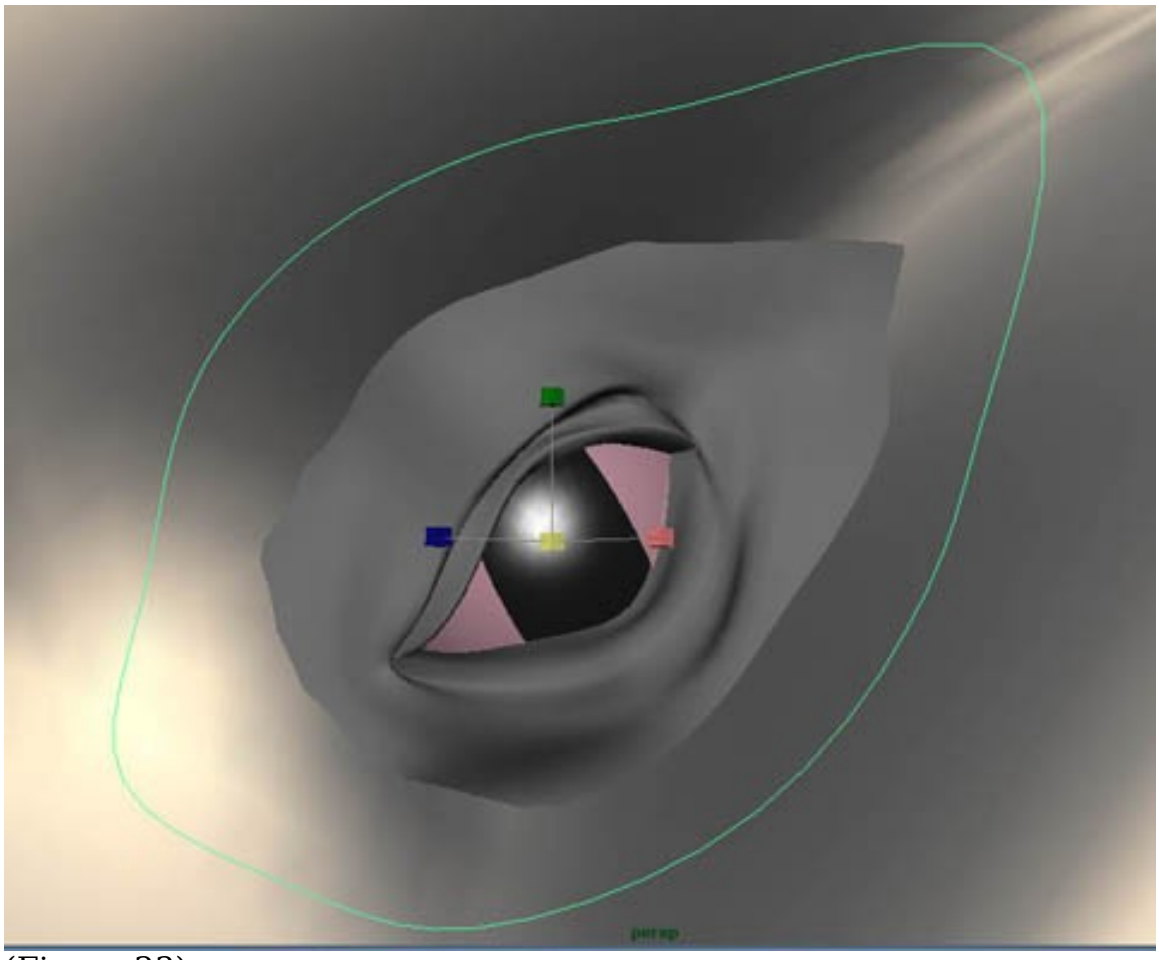
21.Pull harder...(Figure 21)


(Figure 21)

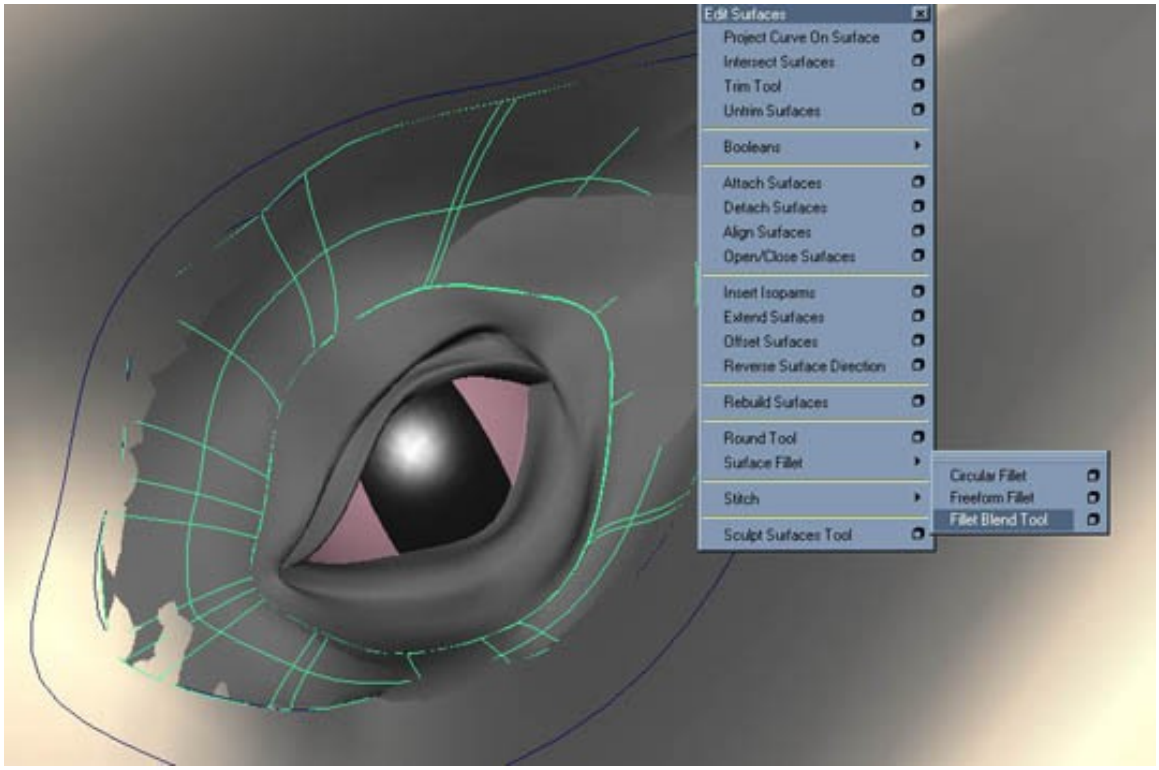
22.O.K, select isoparm as shown .(Figure 22)


(Figure 22)

23.Go to Edit Curves, Duplicate Surface Curve. Once I have the curve duplicated, select it and scale it larger. (Figure 23)

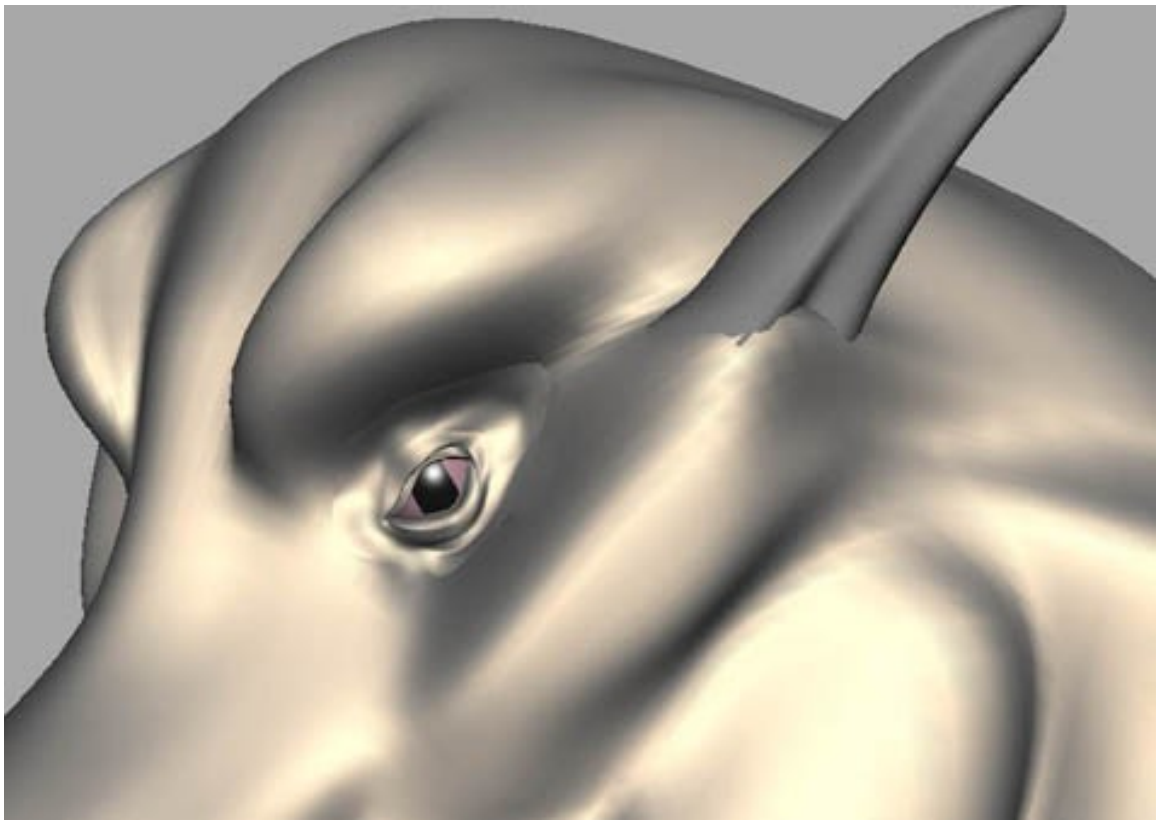

(Figure 23)

24.Then pan the view to where I want the curve to project to, select curve and surface go to Edit Surface, project curve on surface. Next, select the isoparm that we pick in figure 22 and shift select curve on surface that we just projected. Perform Fillet Blend Tool.
(Figure 24)



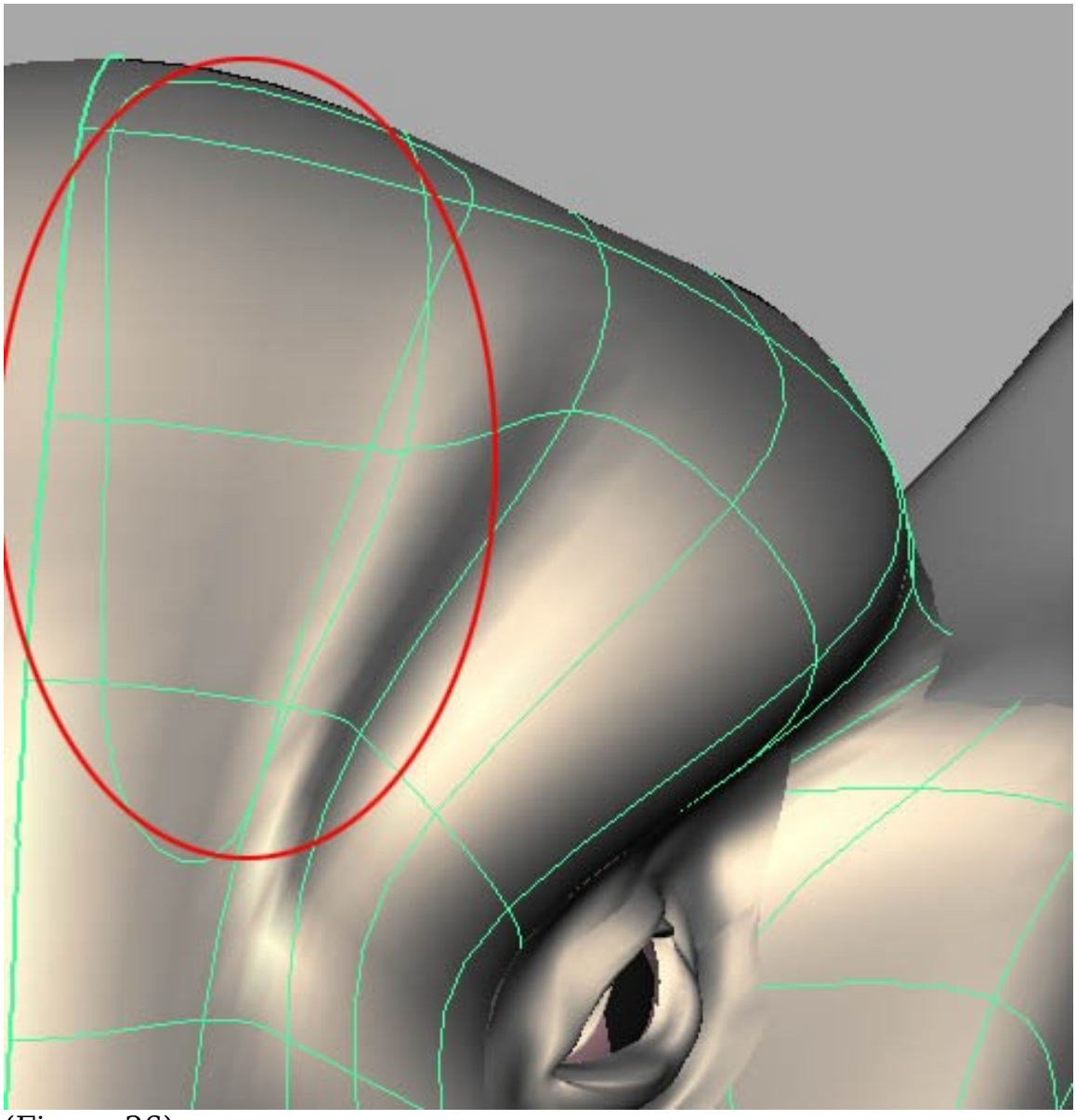
(Figure 24)

25.Delete the curve we duplicated, delete history of fillet surface too. Then pull the CVs of fillet surface to further refine the surface. Note that this time I didn't trim the surface to create "hole" for eye. (I heard that trimmed surface will slow down Maya's performance…is it? Anyway I try to avoid trim and do it other way☺) Don't worry about the prominent edge between the fillet surface and head, I will use texture transparency to fix it. (Figure 25)


(Figure 25)

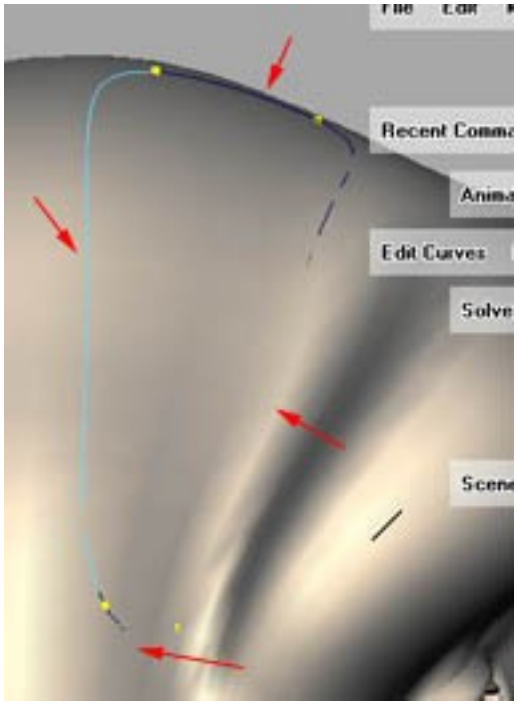
Completing the head

26.Select the head again, detach the head into half…(aiyo…why so troublesome! ☹) Click Make Live icon and draw curve on surface. Hold down C(snap to curve) to close the curve. Turn off Make Live, select the surface curve, duplicate 1 curve then delete the original surface curve.(Figure 26)



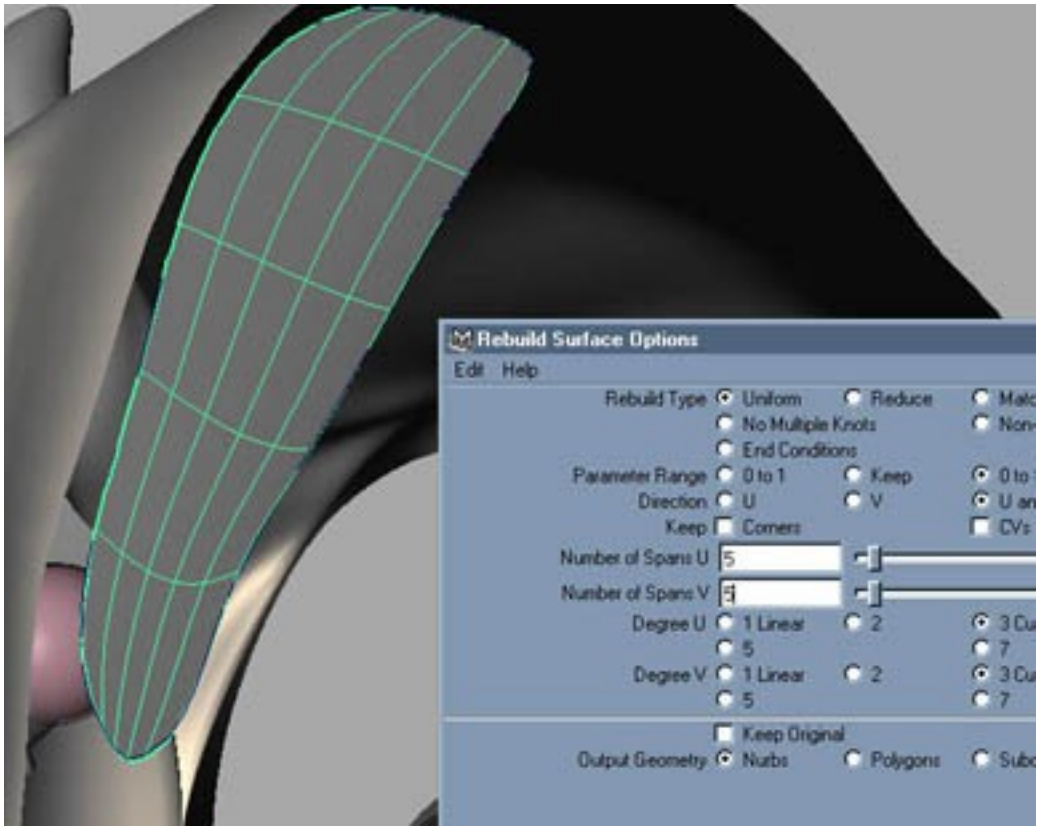
(Figure 26)

27. Select the curve, pick mask Curve Point. Hold down shift to select 4 curve points. Then detach curve. (I don’t understand why my curve broke into some short curves, I have more than 4 curves). I delete the short curves, left only 4 long curves. Then I use snap to curve to join back the end of curves. The final shape looks just the same as figure 27, but it consist of 4 curves instead of 1. (Figure 27)



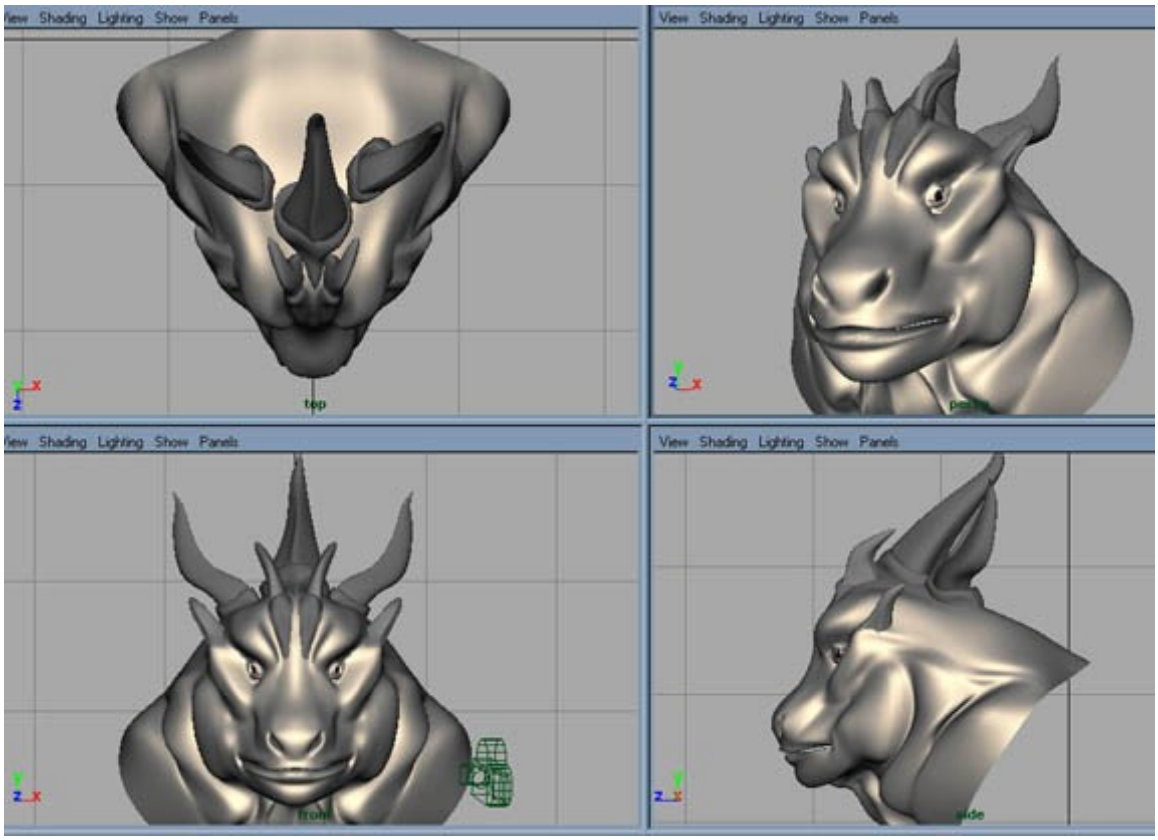
(Figure 27)

28.Next, I use Birail-2 to form the surface shown in figure 28. Then I rebuild the surface for lesser CVs to pull around. (Figure 28)



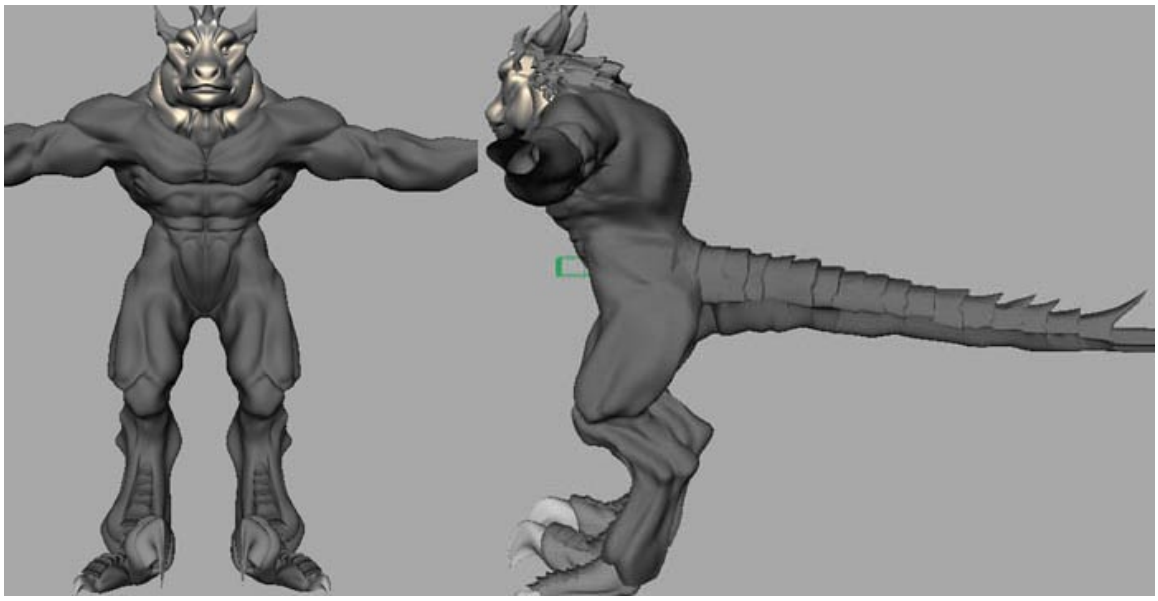
(Figure 28)

29. Finally, I pull the CVs to form the shape that I want. I Insert horn to it. Group up everything and mirror to right. Then attach the head surface together. Don’t forget to rebuild surface.


View Shading Lighting Show Panels
top
View Shading Lighting Show Panels
View Shading Lighting Show Panels
View Shading Lighting Show Panels
(Figure 29)

30.So…we had done the Dragon Man’s head. Next Part, I will share with you how I patch modeling the body. Bye! Figure 30 shown the semi complete Dragon man.

Please visit my web site for part 2 update.
http://oz.nthu.edu.tw/~u850961/dragon/tutor.html



(Figure 30)